

**15-DAY EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DIVISION OF THE STATE ARCHITECT – STRUCTURAL SAFETY**

**REGARDING PROPOSED CHANGES TO
THE CALIFORNIA GREEN BUILDING STANDARDS CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11**

(The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific. (PART 1 – ADMINISTRATIVE CODE))

Legend (and Formatting rationale) for Express Terms:

- 1. Repeal of Existing CALGreen Code:** Existing 2013 CALGreen Code language to be repealed will appear in (single) ~~strikeout~~. *Note that this only occurs for definitions because all other proposed language is new to the 2013 CALGreen Code.*
- 2. Amendment to CALGreen Code due to DSA Emergency Rulemakings:** DSA Emergency Rulemaking language **approved** on July 23, 2015 will appear in (single) underlined. *Note that due the complexity of two consecutive emergency rulemakings by the DSA, there are inaccuracies in the formatting of the 45-Day express terms (for example, some new language is shown in plain text during the 2nd Emergency Rulemaking signifying that the text is existing code language when it is not.) Therefore DSA's 1st emergency language (approved on May 29, 2015) and 2nd emergency language (approved on July 23, 2015) are combined, and any text struck out in the 1st emergency will not be shown in this 15-Day express terms.*
- 3. Amended, or repealed language:** Amended or repealed 15-Day language will appear in italics and double underline and ~~double strikeout~~.
- 4. Rationale:** The justification for the change is shown after each section or series of related changes.
- 5. Notation:** Authority and reference citations are provided at the end of each chapter.

EXPRESS TERMS

...
**SECTION 202
DEFINITIONS**

...
EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF). [DSA] An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency which are two major influences upon on the amount of water that needs to be applied to the landscape.

...
FOOTPRINT AREA. [DSA] The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

..
HYDROZONE. A portion of the landscaped area having plants with similar water needs.

LANDSCAPE (PLANT) COEFFICIENT (K_l). The product of the species factor multiplied by the density factor and the microclimate factor. ($K_l = K_s \times K_d \times K_{mc}$) The landscape coefficient is used in the landscape water budget calculation. (UCGE, 2000) _____

...
MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) [DSA]. The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters. A California regulation commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations. The MWELO regulation establishes a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects.

...
REFERENCE EVAPOTRANSPIRATION (E_{to}). The estimated rate of evapotranspiration from a standardized surface of well watered, actively growing cool season four to seven inch (10.16 to 17.78 cm) turfgrass with sufficient density to fully shade the soil. The water needs of a landscape planting can be calculated by multiplying the Landscape Coefficient [K_l] and Reference Evapotranspiration (E_{to}).

...
SPECIAL LANDSCAPE AREA (SLA). [DSA] ~~For public schools and community colleges, Special Landscape Area means a~~ An area of the landscape dedicated solely to edible plants, planting areas used for educational purposes, recreational areas, areas irrigated with recycled water, water features using recycled water, and where turf provides a playing surface or gathering space.

...
~~**WATER BUDGET.** Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO).~~

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

Formatting Note: For clarification, single strikethrough text denotes deleted existing 2013 code language.

Adding the term, *Footprint Area*, as used in Section 301.4.1 (Scope).

Modifying the term, *Model Water Efficient Landscape Ordinance (MWELO)*, to align with CBSC's definition and updated version of the MWELO.

Modifying the terms, *Evapotranspiration Adjustment Factor (ETAF)*, and *Special Landscape Areas (SLA)*, for clarity or grammar.

Deleting definitions, *Hydrozone*, *Landscape (Plant) Coefficient (k)*, and *Water Budget*, from the 2013 CALGreen Code language. Removing these definitions would align with the California Building Standards Commission (CBSC) and the Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO) in Title 23 of the California Code of Regulations which was recently revised by the Department of Water Resources.

...
**CHAPTER 3
GREEN BUILDING**

301.4 Public schools and community colleges. [DSA] ~~Newly constructed buildings on new or existing sites shall comply with Chapter 5. Additions, 1,000 square feet or more, to existing buildings, newly constructed landscape work, and rehabilitated landscape work shall only be required to comply with Chapter 5, Section 5.304.5, as it relates to the reduction of outdoor water use. Outdoor Water Use.~~

~~For existing sites, this code section 5.304 shall apply to a minimum square footage equal to seventy-five percent of the total building or addition's site footprint in the project's scope of work and can be located in one or more of the following areas:~~

- ~~1. Construction of new landscape areas in the project's scope of site work.~~
- ~~2. Rehabilitation of existing landscape areas in the project's scope of site work.~~
- ~~3. Rehabilitation of existing landscape areas not included in the project's scope of site work.~~

Exceptions:

- ~~1. If the existing site meets the Water Resources Model Water Efficient Landscape Ordinance (MWELo) per Chapter 5, Section 5.304, then the minimum square footage is equal to the landscape area in the project's scope of site work.~~
- ~~2. If the project is only grading and landscaping, then the minimum square footage is equal to the landscape area in the project's scope of site work.~~

301.4.1 Minimum rehabilitated landscape area requirement for existing sites. [DSA] A minimum rehabilitated landscape area equal to seventy-five percent of the footprint area of a new building or of an addition to an existing building shall be provided and comply with Section 5.304.5.

Exceptions:

1. The new building or addition to an existing building is less than 1,600 square feet in floor area.
2. The entire existing site's irrigated landscape areas are in full compliance with Section 5.304.5.
3. The new building or addition to an existing building is be partially or entirely constructed on an existing irrigated landscape or turf lawn area which is not in compliance with the current MWELo requirements and is equal to or greater than the minimum rehabilitated landscape area requirement of Section 301.4.1.

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

*Formatting Note: For clarification, DSA Emergency Rulemaking language **approved** on July 23, 2015 appears in (single) underlined.*

DSA proposes modifications to the scope section language for clarity of the code user and to provide regulatory language rather than informative language. DSA reviewed the implementation of the review process and deemed that better clarification would be needed the *minimum rehabilitated landscape area* requirement for existing sites; and therefore, suggests adding subsection (301.4.1). The proposed exceptions address stakeholders' comments and align with the procedures for review of these regulations.

Add exception 1: This exception sets the threshold for the *minimum rehabilitated landscape area*. DSA talked with stakeholders regarding the square footage thresholds and revised the previous requirement from 1,000 square feet to 1,600 square feet which would allow one regular sized portable classroom or special education classroom to be installed on an existing site without requiring additional landscape work.

Add exception 2: This is similar to the previous exception 1, but revised for purposes of clarity to reference the CALGreen regulations which amends the MWELo adjustment factors.

Add exception 3: This exception addresses stakeholder's request to allow the removal of existing non-compliant landscape areas to be included in meeting the *minimum rehabilitated landscape area* requirement.

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CHAPTER 5 - NON-RESIDENTIAL MANDATORY MEASURES DIVISION 5.3- WATER EFFICIENCY AND CONSERVATION

SECTION 5.302 DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2.

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF).

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SPECIAL LANDSCAPE AREAS (SLA).

...

WATER BUDGET.

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

Propose revising this list to align with added or deleted definitions in Chapter 2.

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CHAPTER 5 - NON-RESIDENTIAL MANDATORY MEASURES DIVISION 5.3 - WATER EFFICIENCY AND CONSERVATION

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SECTION 5.304 OUTDOOR WATER USE

...

[DSA]

5.304.5 Outdoor potable water use in landscape areas ~~2,500 square foot or greater~~ [DSA]. For public schools and community colleges, ~~the outdoor irrigation for landscape projects that are 2,500 square foot or greater~~ landscape projects as described in Sections 5.304.5.1 and 5.304.5.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELo) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

Note: ~~The MWELo prescriptive measures to assist in compliance with the water budget are listed in Sections 402.4 through 402.8, 402.10 and 402.11 of the MWELo, which may be found at: <http://www.water.ca.gov/wateruseefficiency/docs/WaterOrdSec402.cfm>.~~

Exception: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELo.

5.304.5.1 Newly constructed landscapes. [DSA] New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

5.304.5.2 Rehabilitated landscapes. [DSA] Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

*Formatting Note: For clarification, DSA Emergency Rulemaking language **approved** on July 23, 2015 appears in (single) underlined.*

Section 5.304.5: Propose amending this section to align with DWR's 2015 MWELO regulations, specifically Section 409.1 Applicability, which reduced the outdoor water use trigger from 2,500 square feet of landscape area to 500 square feet of new landscape area.

Adding exception to 5.304.5: DSA proposes adding this exception to the square footage threshold for an alternate compliance method. DSA consulted DWR to understand the intent of Applicability Section 490.1(c) of the 2015 MWELO. After talking with the DWR, DSA learned that this section pertains to all projects, new and rehabilitated, allowing an option of compliance methods.

Adding subsections 5.304.1: Propose adding subsections to define the square footage threshold for new landscape projects as indicated in the Applicability Section 490.1 (a)(1) of the MWELO.

Adding subsection 5.304.5.2: Propose adding subsections to define the square footage threshold for rehabilitated landscape projects as indicated in the Applicability Section 490.1 (a)(2) of the MWELO with the exception that the square footage is lowered to 1,200 square feet (s.f.) to align with the minimum landscape area requirement for existing sites indicated in DSA's proposed Scope Section 301.4.1; exception 1(i.e. 75% of 1,600 s.f. = 1,200 s.f.).

~~5.304.6 Alternate methods to reduce outdoor potable water use in landscape areas. As allowed by a district's local city or county water or health agency, methods to reduce potable water use in landscape areas shall be permitted to include but are not limited to:~~

- ~~1. On site: Use of captured rainwater, recycled water, or graywater designed per the California Plumbing Code.~~
 - ~~a. Supplementary water supply: The use of potable water shall be permitted as a back-up water supply for on-site water reuse systems.~~
- ~~2. Off site: Water treated for irrigation purposes and conveyed by a water district or public entity.~~

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

Section 5.304.6: Propose repealing Section 5.304.6. The Commission and the public commented on CBSC's related section (5.304.2) during the May 29, 2015 Commission meeting and stated that the language is more informative than regulatory. Although the language was approved as submitted during the emergency rulemaking hearing, CBSC is proposing to repeal this language during the certifying rulemaking process. As part of the 45-day review, DSA also proposes to repeal this language to align with CBSC.

~~5.304.6.1 Authorized potable water use. The use of potable water shall be authorized where~~

~~necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency.~~

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

Section 5.304.6.1: Propose repealing Section 5.304.6.1. The Commission and the public commented on CBSC's related section (5.304.2.1) during the May 29, 2015 Commission meeting and stated that the language is more informative than regulatory; the use of potable water is already authorized for outdoor water use. Although the language was approved as submitted during the emergency rulemaking hearing, CBSC is proposing to repeal this language during the certifying rulemaking process. As part of the 45-day review, DSA also proposes to repeal this language to align with CBSC.

~~**5.304.7 Alternate Outdoor water use in landscape areas 1,000 to 2,499 square foot.** When water is used for outdoor irrigation for landscape projects at least 1,000 square foot but not more than 2,499 square foot, the following shall apply:~~

~~**5.304.7.1 Irrigation controller and sensor application.** In new construction or building addition with at least 1,000 but not more than 2,499 square foot of cumulative landscaped area (the level at which the MWELQ applies), install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.~~

~~**5.304.7.2 Controllers.** Automatic irrigation system controllers installed at the time of final inspection shall comply with the following:~~

~~1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.~~

~~2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.~~

~~**Note:** More information regarding irrigation controller function and specifications is available from the Irrigation Association.~~

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

Sections 5.304.7, 5.304.7.1, and 5.304.7.2: Propose repealing Section 5.304.7 and subsections regarding alternate outdoor water use in landscape areas of 1,000 to 2,499 square feet. DWR's 2015 MWELQ reduced the performance compliance measures from 2,500 square feet of landscape area to 500 square feet of landscape area; and for smaller landscape areas, irrigation controllers and weather based sensors are required in the alternate prescriptive compliance measures contained in Appendix D of the 2015 MWELQ regulations. Therefore, Section 5.304.7 provisions are no longer necessary and would be in conflict with the 2015 MWELQ regulations.

~~**5.304.8 Outdoor water use meters.** For new or upgraded water service landscaped areas of at least 1,000 square foot but not more than 5,000 square foot (the level at which Water Code §535 applies), separate submeters or metering devices shall be installed for outdoor water use.~~

~~**Note:** Installation of multiple submeters is allowable for existing sites.~~

Notation:

Authority: Education Code Sections 17280—17317 and 81130--81147.

References: Education Code Sections 17310 and 81142.

Rationale:

Section 5.304.8: Propose repealing Section 5.304.8. The 2015 MWELO regulation now requires landscape water meters to be installed for all non-residential irrigated landscape areas of 1,000 square feet, but not more than 5,000 square feet per MWELO Section 492.7, Irrigation Design Plan. Therefore, the provisions in this section 5.304.8 are no longer necessary.